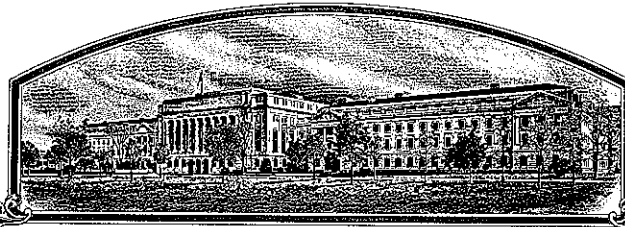


No.

9600186



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Barham Seeds, Inc.*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED, PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE ABOVE PURPOSE, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WATERMELON

'B26'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this thirty-first day of May, in the year of our Lord two thousand.*

Attest:

*Ann Marie Laro*

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*[Signature]*

Secretary of Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions.

9600186

FORM APPROVED - OMB NO. 0581-005

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE DIVISION - PLANT VARIETY PROTECTION OFFICE

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a).

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) <b>Barham Seeds, Inc.</b>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER <b>B26</b>	3. VARIETY NAME <b>B26</b> <i>SMALLER LETTER 12/1/99</i>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>7401 Crawford, Dr. Gilroy, Ca. 95020</b>		5. TELEPHONE (include area code) <b>(408) 847-3056</b>	<b>FOR OFFICIAL USE ONLY</b> PVPO NUMBER <b>9600186</b> DATE <b>03-18-96</b> FILING AND EXAMINATION FEE <b>\$2450.00</b> DATE <b>03-18-96</b> CERTIFICATION FEE <b>\$0</b> DATE <b>3/17/00</b>
		6. FAX (include area code) <b>(408) 847 6706</b>	
7. GENUS AND SPECIES NAME <b>Citrus latifolius</b>	8. FAMILY NAME (Botanical) <b>Cucurbitaceae</b>		
9. CROP KIND NAME (Common name) <b>Watermelon</b>			
10. IF THE APPLICANT NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) (Common name) <b>Corporation</b>			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>California</b>		12. DATE OF INCORPORATION <b>Oct. 2, 1988</b>	
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS <b>Dr. Warren S. Barham Barham Seeds, Inc. 7401 Crawford Dr. Gilroy, Ca. 95020</b>			14. TELEPHONE (include area code) <b>(408) 847 3056</b>
			15. FAX (include area code) <b>(408) 847 6706</b>
16. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse)			
a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of the Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Applicant's Ownership f. <input checked="" type="checkbox"/> Voucher Sample (2,500 viable untreated seeds or, for tuber propagated varieties verification that tissue culture will be deposited and maintained in a public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$2,450), made payable to "Treasurer of the United States" (Mail to PVPO)			
17. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY, AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act)? <input type="checkbox"/> YES (If "yes," answer items 18 and 19 below) <input checked="" type="checkbox"/> NO (If "no," go to item 20)			
18. DOES THE APPLICANT SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		19. IF "YES" TO ITEM 18, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED	
20. HAS THE VARIETY OR A HYBRID PRODUCED FROM THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES? <input type="checkbox"/> YES (If "yes," give names of countries and dates) <input checked="" type="checkbox"/> NO			
21. The applicant(s) declare that a viable sample of basic seed of the variety will be furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate. The undersigned applicant(s) is(are) the owner(s) of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is(are) informed that false representation herein can jeopardize protection and result in penalties.			
SIGNATURE OF APPLICANT (Owner(s)) <b>Warren S. Barham Barham Seeds, Inc.</b>		SIGNATURE OF APPLICANT (Owner(s))	
NAME (Please print or type) <b>Warren S. Barham</b>		NAME (Please print or type)	
CAPACITY OR TITLE <b>C.E.O. &amp; Board Chairman</b>	DATE <b>March 23, 1996</b>	CAPACITY OR TITLE	DATE

**Exhibit A - Origin and Breeding History of Variety B26**

B26 originated from a cross between Calsweet and a non-lobed leaf line from the University of Kentucky. This first cross was made in 1984 and then backcrossed to Calsweet in 1985. Plants of the first backcross generation were self pollinated in 1986. Subsequent generations were obtained through selection for superior type and performance and self pollinating in the years 1987 through 1993. At this point selections of B26 were obtained that bred true for leaf and rind pattern, black mottled seed color, seed size, fruit size, maturity, and other characteristics of horticultural importance. B26 does show the expected normal environmental variations for fruit size and shape.

(#9600186)

5. The watermelon variety B26 originated from a cross between the variety "Calsweet" and "Ky J-2NL" in 1984. Ky J-2NL was a breeding line provided to Dr. Warren S. Barham by Dr. M. C. Mohr who was a member of the Horticulture Faculty at the University of Kentucky. Interest in the breeding line Ky J-2NL was as a source of the non-lobed leaf character that Ky J-2NL possessed.
6. Dr. Mohr found a spontaneous mutant with leaves lacking the normal lobing character in his watermelon breeding program (personal communication to Warren Barham). Though we do not know the original material that gave rise to Ky J-2NL and Dr. Mohr is now deceased and the records of his breeding program have, to the best of our knowledge, been disposed of, Dr. Warren Barham recalls that Dr. Mohr published a paper reporting single-gene control of the non-lobed character in watermelons in 1953. We do not have a copy of that paper or know where to find it. However, we conclude that the origin of Ky J-2NL is prior to 1953.
8. The original cross between Calsweet and Ky J-2NL was made in 1984 and backcrossed to Calsweet in 1985. The F1 of the backcross was selfed in 1986. Selfed fruit that were blocky (a term used in the watermelon industry to mean oblong, i.e. between round and long) and had rind pattern similar to that of Calsweet were cut and checked for rind and flesh quality. Seed were saved of fruit that were free of rind necrosis, ribbing, and had flesh quality considered to be equal to Calsweet. In 1987, non-lobed leaf plants were selected for selfing. Selfed fruit that were blocky and had a rind pattern and fruit sized similar to Calsweet were cut and checked for rind and flesh quality. Seed were saved of fruit that were free of rind necrosis and ribbing, and that had flesh quality considered to be equal to Calsweet. Since the non-lobed leaf character is controlled by a single gene and non-lobed plants breed true for this characteristic, all plants in the 1988 (F3 of the backcross generations) were non-lobed. Blocky fruit, free of ribbing and with rind pattern and fruit size similar to Calsweet were cut and checked for rind and flesh quality in 1988. Seed were saved of fruit free of rind necrosis, ribbing and that had flesh quality considered to be equal to Calsweet. This procedure was repeated in 1989 and each year through 1993. Thus a total of seven generations starting with the F2 in 1987 were "rogued" to help insure a variety breeding true for horticultural characteristics considered important.
9. The percent plants rogued out and fruit discarded in each generation were not recorded. However, the breeder Warren Barham estimated that 98% of F2 of the backcross plants were discarded in 1987. In the generations that followed, severe roguing was not necessary and we estimate 5 to 10 percent were discarded each generation.

10. In every generation the selection criteria were the same: non-lobed leaf, dark striped rind, flesh color equal to Calsweet, large fruit with a blocky shape, and vigorous plant growth.
- 11 & 12. The pedigree breeding method was used in developing B26. Selection was based on selfing individual plants from F2 in 1987 through F8 in 1993. At F8 seed from the selected fruit were bulked for increase. The subsequent generations were massed and rogued with no variants found.
13. The main variety characteristics of dark mottled stripe, non-lobed leaf, blocky fruit shape, and black speckled seed have all bred true since the F4 generation. Thus four generations of selfing were carried out with no variation for type before the variety was bulked for increase. Since bulking, no variations for the main variety characteristic have been observed, and no variants exist within the variety B26.
14. No variants have ever been observed in B26.
15. B26 most closely resembles Calsweet (one of its parents). The non-lobed character bred in to B26 is completely non-lobed at the third leaf stage and most clearly seen when the leaf is flattened. Under field conditions the B26 non-lobed leaf assumes a slight three dimensional shape that may appear to have a slight lobing. However, Calsweet (and all other lobed leaf watermelons that we have observed) are so much more fully lobed in appearance that there is no mistaking the non-lobed character and seeing the difference from the standard lobed leaf of Calsweet. Please see additional picture provided. The seed color of Calsweet compared to B26 is also distinct and not considered to be a quantitative character but rather a qualitative character. The additional photograph included shows B26 speckled seed versus Calsweet black seed. Other than these two clearly defined characters we are claiming no difference between B26 and Calsweet for the purposes of PVP.

**Exhibit B - Novelty Statement**

B26 is unique in the Calsweet class of watermelon. Although fruit of B26 appear similar to Calsweet, B26 fruit have slightly darker rind, are a little more blocky in shape, and generally average 1 to 2 kg heavier fruit than Calsweet in experimental tests. B26 is clearly distinguished from Calsweet by B26's non-lobed leaf character (Calsweet is normal lobed-leaf) and by B26's mottled black seed (Calsweet has black seed).



*Barham Seeds, Inc.  
Watermelon - B26 (showing non-lobed leaf  
characteristic of this variety)*

## EXHIBIT B

15. B26 most closely resembles Calsweet (one of its parents). The non-lobed character bred in to B26 is completely non-lobed at the third leaf stage and most clearly seen when the leaf is flattened. Under field conditions the B26 non-lobed leaf assumes a slight three dimensional shape that may appear to have a slight lobing. However, Calsweet (and all other lobed leaf watermelons that we have observed) are so much more fully lobed in appearance that there is no mistaking the non-lobed character and seeing the difference from the standard lobed leaf of Calsweet. Please see additional picture provided. The seed color of Calsweet compared to B26 is also distinct and not considered to be a quantitative character but rather a qualitative character. The additional photograph included shows B26 speckled seed versus Calsweet black seed. Other than these two clearly defined characters we are claiming no difference between B26 and Calsweet for the purposes of PVP.

UNITED STATES DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
COMMODITIES SCIENTIFIC SUPPORT DIVISION  
BELTSVILLE, MARYLAND 20705EXHIBIT C  
(Watermelon)OBJECTIVE DESCRIPTION OF VARIETY  
WATERMELON (CITRULLUS LANATUS)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

Barham Seeds, Inc.  
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)  
7401 Crawford Dr  
Gilroy, Ca. 95020

FOR OFFICIAL USE ONLY

PVPO NUMBER 9600186

VARIETY NAME OR TEMPORARY  
DESIGNATIONPlace the appropriate number that describes the varietal character of this variety in the boxes below.  
Place a zero in first box (e.g.  or ) when number is either 99 or less or 9 or less.

## 1. TYPE:

 1 = OBLONG      2 = ROUND LARGE      3 = ROUND SMALL (icebox)

## 2. AREA OF BEST ADAPTATION:

 1 = SOUTH      2 = NORTHEAST/NORTHCENTRAL      3 = SOUTHWEST      4 = MOST AREAS

## 3. EMERGENCE TO ANTHESIS:

<input type="text" value="0"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="5"/>	NO. OF DAYS EARLIER THAN .....	<input style="border: 1px solid black; padding: 0 5px;" type="text" value="2"/>	}	1 = CHARLESTON GREY
<input type="text" value=""/> <input type="text" value=""/>	NO. OF DAYS LATER THAN .....	<input type="text" value=""/>		2 = OTHER (Specify) <u>Calsweet</u>

## 4. POLLINATION TO MATURITY:

<input type="text" value="0"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="3"/>	NO. OF DAYS EARLIER THAN .....	<input style="border: 1px solid black; padding: 0 5px;" type="text" value="2"/>	}	1 = CHARLESTON GREY
<input type="text" value=""/> <input type="text" value=""/>	NO. OF DAYS LATER THAN .....	<input type="text" value=""/>		2 = OTHER (Specify) <u>Calsweet</u>

## 5. PLOIDY:

 1 = DIPLOID      2 = TETRAPLOID      3 = TRIPLOID

## 6. PLANT

<input style="border: 1px solid black; padding: 0 5px;" type="text" value="1"/>	Cotyledon:	1 = FLAT      2 = FOLDED	<input style="border: 1px solid black; padding: 0 5px;" type="text" value="1"/>	1 = MONOECIOUS      2 = ANDROMONOECIOUS			
Number of flowers per plant at first fruit set:							
<input type="text" value="2"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="0"/>	STAMINATE	<input type="text" value="0"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="3"/>	PISTILLATE	<input type="text" value="0"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="0"/>	PERFECT	<input style="border: 1px solid black; padding: 0 5px;" type="text" value="4"/>	NO. OF MAIN STEMS AT CROWN

## 7. STEM:

<input style="border: 1px solid black; padding: 0 5px;" type="text" value="1"/>	1 = ROUND      2 = ANGULAR	<input type="text" value="1"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="0"/>	MM. DIAMETER AT SECOND NODE
<input style="border: 1px solid black; padding: 0 5px;" type="text" value="3"/>	1 = GLABROUS      2 = SCABROUS      3 = PUBESCENT      4 = BRISTLED		
<input type="text" value="8"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="2"/>	CM. VINE LENGTH ÷ NO. OF INTERNODES (At last harvest)		

## 8. LEAF:

<input style="border: 1px solid black; padding: 0 5px;" type="text" value="1"/>	1 = OVATE      2 = OBOVATE      3 = ROUND	<input style="border: 1px solid black; padding: 0 5px;" type="text" value="2"/>	1 = LONGER THAN WIDE      2 = LENGTH-WIDTH EQUAL 3 = WIDER THAN LONG
<input style="border: 1px solid black; padding: 0 5px;" type="text" value="2"/>	Dorsal Surface:	}	
<input style="border: 1px solid black; padding: 0 5px;" type="text" value="2"/>	Ventral Surface:		
	1 = SMOOTH      2 = PUBESCENT	<input style="border: 1px solid black; padding: 0 5px;" type="text" value="4"/>	Color: 1 = LIGHT GREEN      2 = GRAY GREEN 3 = MEDIUM GREEN      4 = DARK GREEN

## 9. FLOWER (At first fruit set):

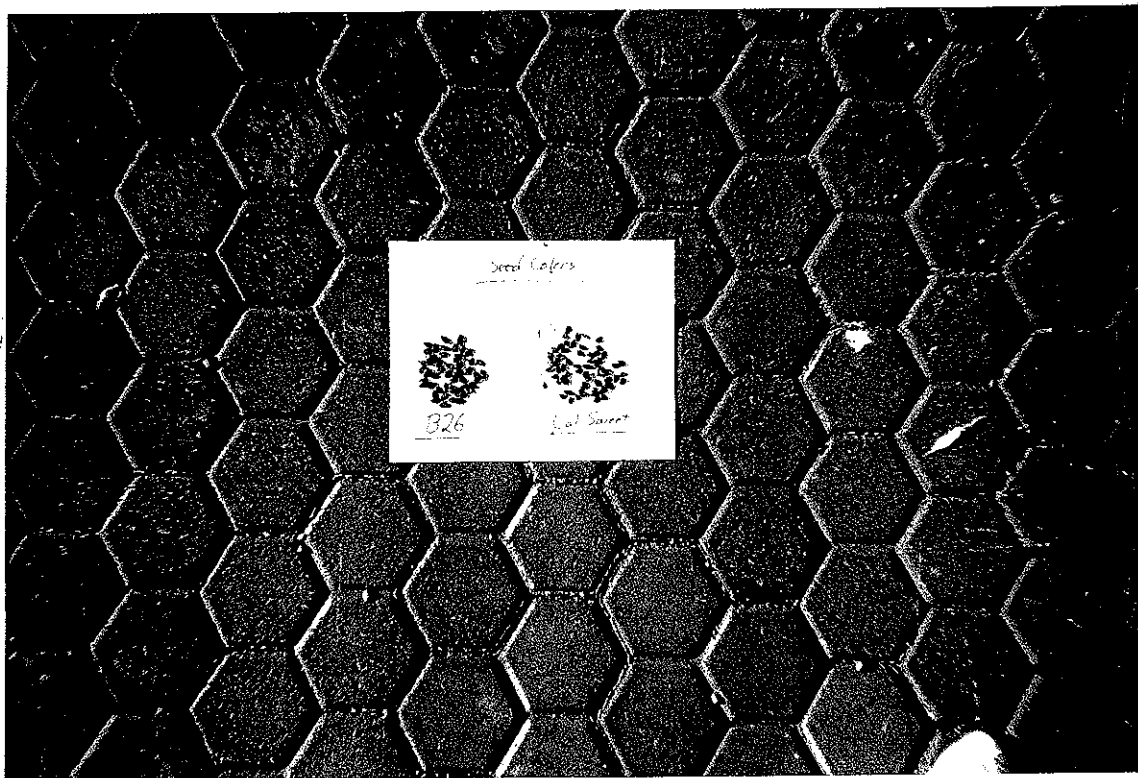
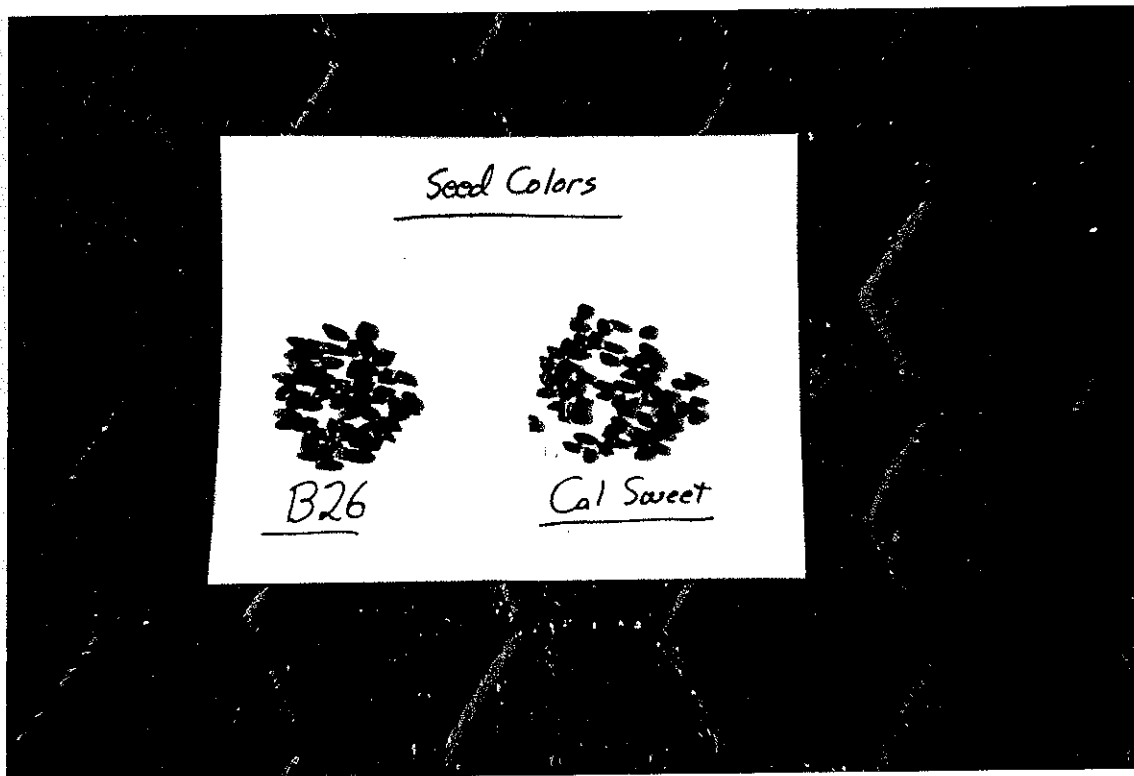
<input type="text" value="0"/> <input style="border: 1px solid black; padding: 0 5px;" type="text" value="4"/>	Staminate: CM. ACROSS	<input type="text" value=""/> <input type="text" value=""/>	Perfect: CM. ACROSS	<input style="border: 1px solid black; padding: 0 5px;" type="text" value="2"/>	Color: 1 = LEMON YELLOW 2 = YELLOW      3 = ORANGE
--	-----------------------	---	---------------------	---	---



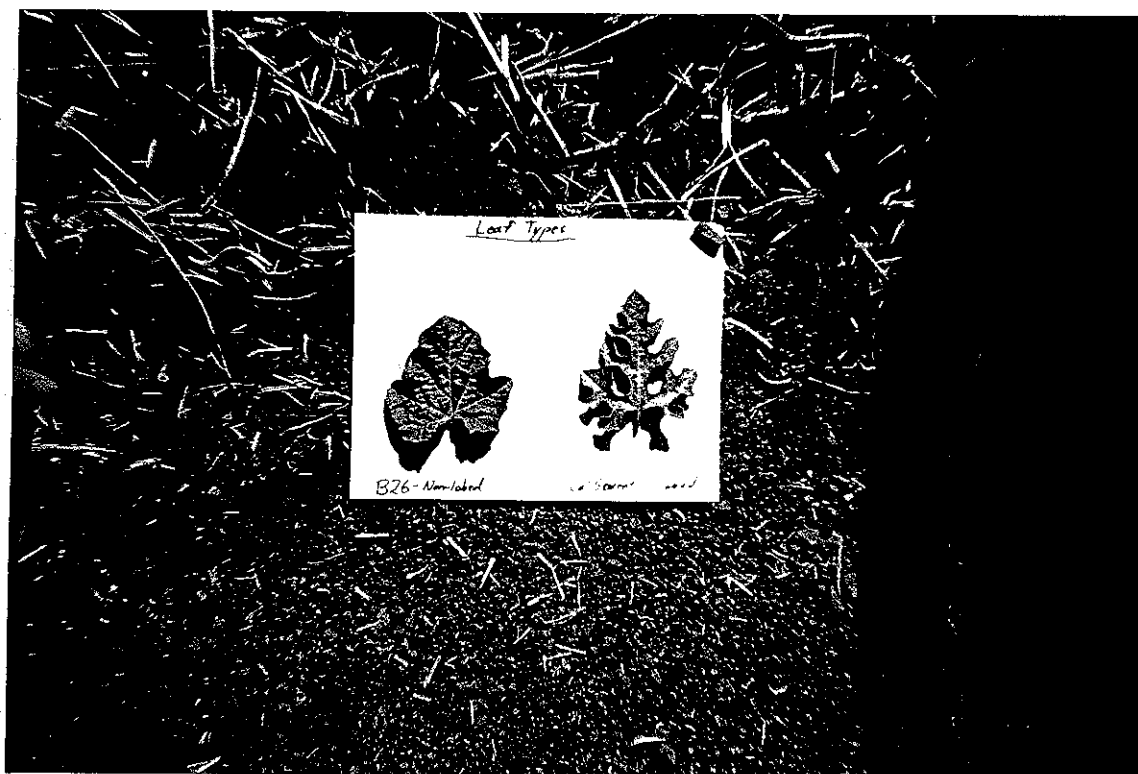
9600186



RECEIVED 06/12/97



RECEIVED 06/12/97



RECEIVED 06/12/97

EXHIBIT E  
STATEMENT OF THE BASIS OF OWNERSHIP

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) <i>Barham Seeds, Inc.</i>		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME <i>B26</i>
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <i>7401 Crawford Dr. Gilroy, CA 95020 USA</i>		5. TELEPHONE (include area code) <i>408 847 3056</i>	6. FAX (include area code) <i>408 847 5877</i>
		7. PVPO NUMBER <i>#9600186</i>	

8. Does the applicant own all rights to the variety? Mark an "X" in appropriate block. If no, please explain.

☒ YES ☐ NO

9. Is the applicant (individual or company) a U.S. national or U.S. based company?  
If no, give name of country

☒ YES ☐ NO

10. Is the applicant the original owner? ☒ YES ☐ NO If no, please answer the following:

a. If original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. national(s)?  
☐ YES ☐ NO If no, give name of country

b. If original rights to variety were owned by a company, is the original owner(s) a U.S. based company?  
☐ YES ☐ NO If no, give name of country

11. Additional explanation on ownership (If needed, use reverse for extra space):

*Warren S. Barham and his wife were the sole owners of Barham Seeds, Inc. in 1988. When the cross and development of B26 began, Barham Seeds, Inc., did not yet exist. All Warren Barham's watermelon germplasm and ownership of watermelon germplasm including the B26 breeding material was transferred to Barham Seeds Inc. when the company was incorporated and formed in California in 1988.*

PLEASE NOTE:

Plant variety protection can be afforded only to owners (not licensees) who meet one of the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definition.

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at (202) 720-5881 (voice) or (202) 720-7808 (TDD). To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call 1-800-245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.

**Exhibit E - Statement of Applicant's Ownership**

Dr. Warren S. Barham, C.E.O. of Barham Seeds, Inc., believes he is the sole originator and first breeder of B26 and that Barham Seeds, Inc. is the sole owner of Watermelon B26.